



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Texas

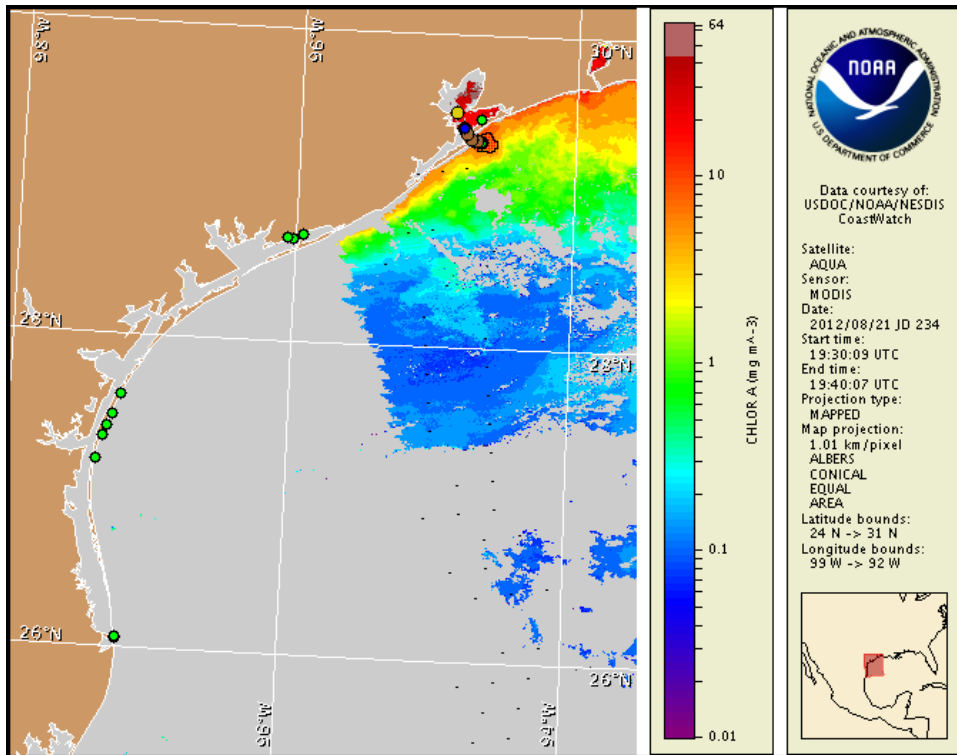
Thursday, 23 August 2012

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, August 20, 2012



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from August 13 to 21 shown as red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

Detailed sample information can be obtained through the Texas Parks and Wildlife Department at:

<http://www.tpwd.state.tx.us/landwater/water/envconcerns/hab/redtide/status.phtml>

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit the NOAA Harmful Algal Bloom Operational Forecast System bulletin archive:

<http://tidesandcurrents.noaa.gov/hab/bulletins.html>

Conditions Report

A harmful algal bloom of *Karenia brevis* is present along the Texas coast, in the Galveston region. In the Galveston area, patchy moderate impacts are possible today through Sunday. No additional impacts are expected at the coast in Texas today through Sunday, August 26. For information on area shellfish restrictions, contact the Texas Department of State Health Services.

Analysis

A harmful algal bloom of *Karenia brevis* is present at various locations within Galveston Bay. The most recent samples continue to confirm 'very low b' to 'low b' concentrations of *K. brevis* at Houston Ship Channel (HSC) markers 16, 25, 35, 47 and 55, the east end of the seawall, and the base of the south jetty/Bolivar Roads Pass (8/20; TPWD). While 'low a' *K. brevis* concentrations continue to be reported at most of the above locations, concentrations at HSC marker 47 increased from 'low a' to 'low b', while those at HSC marker 35 decreased from 'low a' to 'very low b'. *K. brevis* concentrations at the end of south jetty (channel side)/Bolivar Roads Pass also decreased from 'low b' to 'not present' in sampling from 8/16 to 8/20 (TPWD). Sampling within East Bay at the tide gauge marker south of Hannah's Reef continues to indicate that *K. brevis* is not present (8/13-20; TPWD). No recent reports of dead fish, discolored water, or respiratory irritation have been received from the Galveston region (8/22; TPWD).

There have been no reports of *K. brevis* elsewhere along the Texas coast. Recent samples collected alongshore Padre Island National Seashore indicate that *K. brevis* is not present (8/21; TPWD). Overflights conducted on 8/16 revealed no visible read tide or dead fish from the Bolivar Peninsula to the Rio Grande, including the Gulf beaches and all major and minor bays; however, the Texas coastline will continue to be monitored regularly for *K. brevis* (8/16; TPWD).

Recent MODIS imagery (8/21; shown left) is partially obscured by clouds along- and off-shore from San Luis Pass south to the Rio Grande, limiting analysis of the Texas coastline. Elevated to high chlorophyll (3-17 $\mu\text{g/L}$) is visible stretching along- and offshore from Sabine Pass to Galveston Island, including a patch of high chlorophyll (10-17 $\mu\text{g/L}$) stretching offshore from the mouth of Bolivar Roads Pass, where 'low' concentrations of *K. brevis* have been recently identified (8/13-20; TPWD, TDSHS). Elevated chlorophyll is not necessarily indicative of the presence of *K. brevis* and could also be due to the resuspension of benthic chlorophyll and sediments along the coast. In situ sampling is necessary to confirm the presence of *K. brevis*.

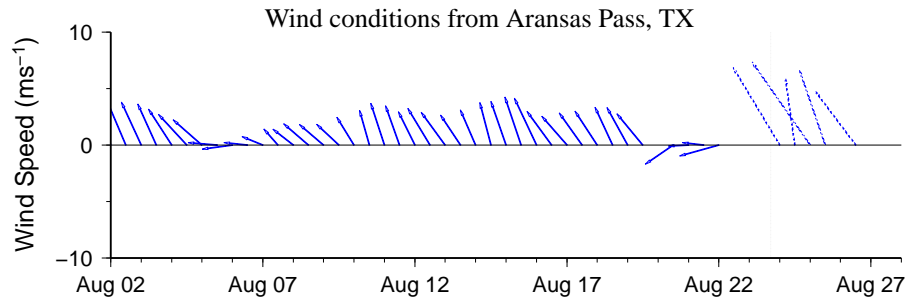
Forecast models based on predicted near-surface currents indicate a maximum bloom transport from coastal sample locations of 40 km south from the Galveston region and a potential transport of 15 km south from the Port Aransas region from August 20-26.

Derner, Davis

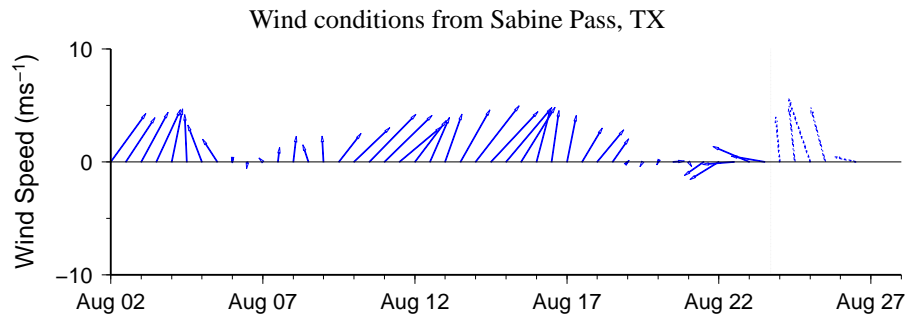
Wind Analysis

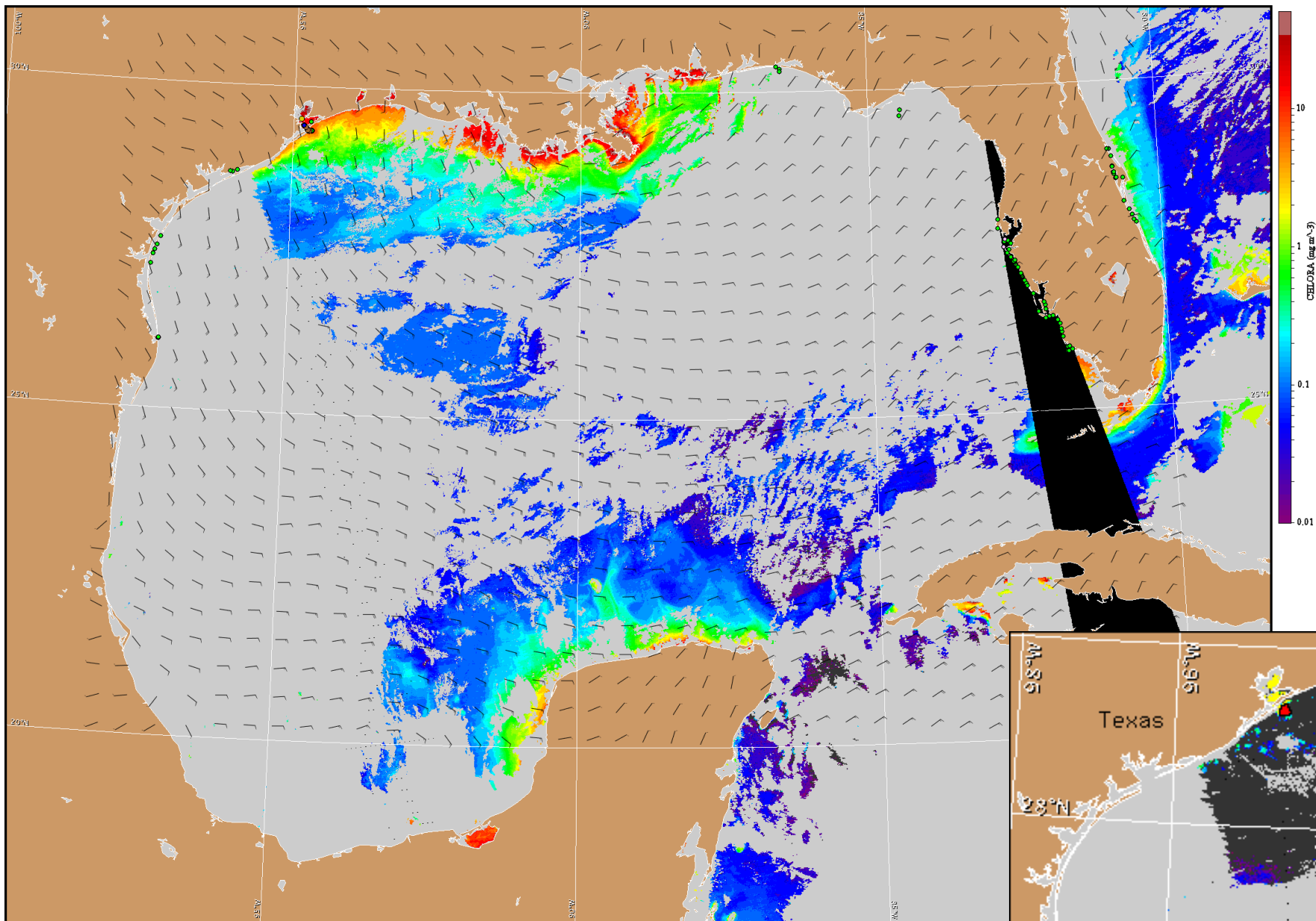
Port Aransas: East winds (5kn, 3m/s) today becoming southeast (10-20kn, 5-10m/s) this afternoon through tonight. South winds (10-15kn, 5-8m/s) Friday becoming southeast (10-20kn) Friday afternoon through Sunday.

Galveston: Southeast winds (5-15kn, 3-8m/s) today. South winds (10-20kn) Friday and Saturday becoming southeast (10-15kn) Saturday night through Sunday. East winds (5-10kn, 3-5m/s) Sunday night.



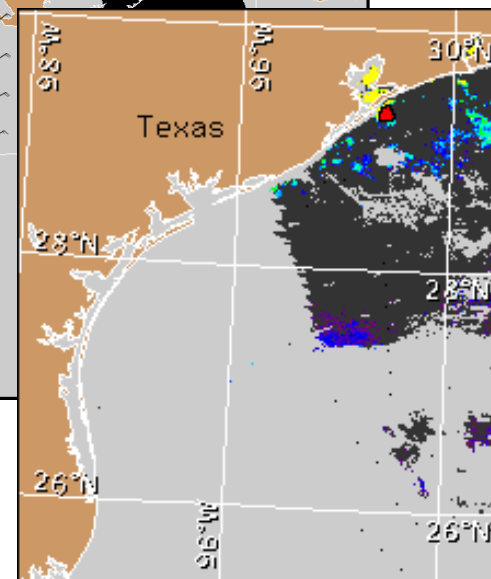
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).





Satellite chlorophyll image and forecast winds for August 24, 2012 12Z with cell concentration sampling data from August 13 to 21 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

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Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).